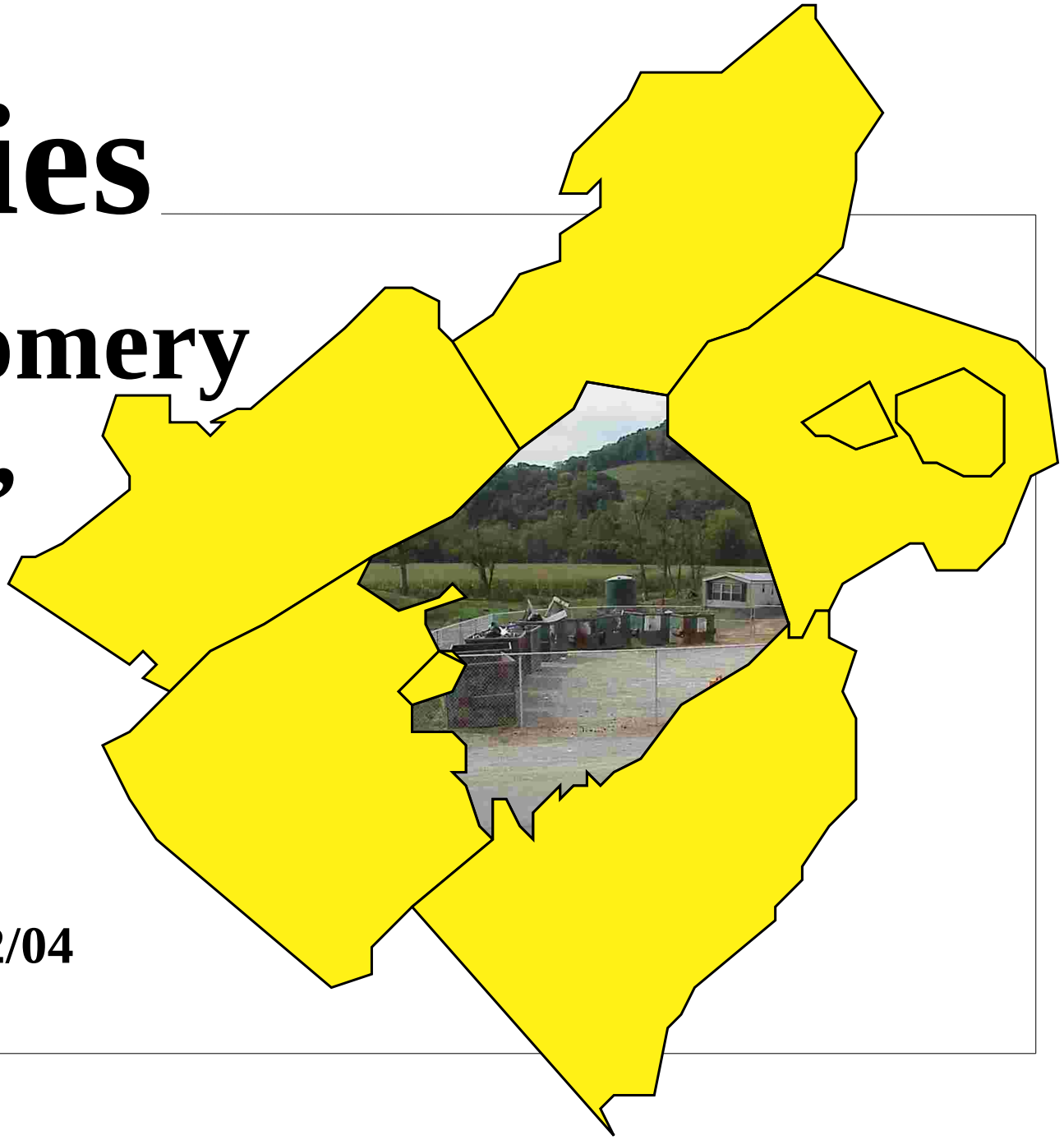
Utilities

Montgomery County, 2025



Adopted: 10/12/04

Utilities: Executive Summary

The Utilities Chapter of Montgomery County 2025 covers four distinct areas of concern: 1) public and private water and sewer; 2) electric, telecommunications, and gas utilities; 3) solid waste; and 4) stormwater management. The goals included in this chapter focus on:

- Increased cooperation between jurisdictions;
- Maintaining environmental quality;
- Increased public awareness and involvement;
- Increased public and private responsibility; and
- The effective and efficient provision of public, quasi-public, and private utilities.

Utilities: Introduction

COMMUNITY SURVEY RESULTS

The survey asked participants to rank four utility-related issues: 1) public water and sewer, 2) concentrating growth where utilities are already provided, 3) concern over old or failing septic systems, and 4) trash collection facilities.

Of the 815 county residents who responded to the Community Survey (1), 56% felt that it was either " important" or "very important" to concentrate growth where utilities we already provided. An additional 25% felt it was "moderately important." Only 3% (25 respondents) felt it was "not important." In most cases, those who suggest concentrating growth also express a concern for either agricultural or open space preservation. As one participant noted, Montgomery County should, in the future, see that" large contiguous areas of farm and forest lands are protected by conservation easements" while "development is concentrated in growth areas served by public water, sewer." In addition, those who noted the need for the provision of quality public utilities, also emphasized open space and/or ample outdoor activities and opportunities.

As with other areas, there was a strong emphasis on interjurisdictional cooperation. Of the 815 respondents to the citizen survey, 69% rated the provision of public water and sewer as either "important" or "very important." Only 23 respondents (3%) felt that public water and sewer was "not important." Some of the respondents who included utility comments in their future statement suggested that they wanted to see increased cooperation between the towns, county, and, in some cases, Virginia Tech, especially in terms of the provision of public water, sewer, and trash collection. Others, on the other hand wanted to see the expansion of existing town water and sewer either extended into the county or see the merging of the individual public service providers into one organization. Regardless of how each respondent defined the method of distribution or the provider, the majority of respondents, in one way or another, expressed an interest in the effective and efficient provision of public service.

In addition to concerns about the provision of public water and sewer, participants also expressed a concern about private water and sewer systems (wells and septic systems) and their impact on groundwater and surface water quality. More than half of the respondents (57%) felt that concern over old or failing septic systems was either "important" or "very important," while a combined 86% of respondents rated groundwater and surface water protection as being "important" (19%) or "very important" (67%). As one respondent noted, "there are too many septic systems for the geology," while another observed that "we must protect groundwater and limit the number of homes or businesses drawing water from underground resources since it is difficult to determine how much water is there."

Notes:
1. The Community Survey generated 826 responses; however, 11 responses were received well after the deadline. The written comments from these surveys were included in the results, the quantitative data was not.

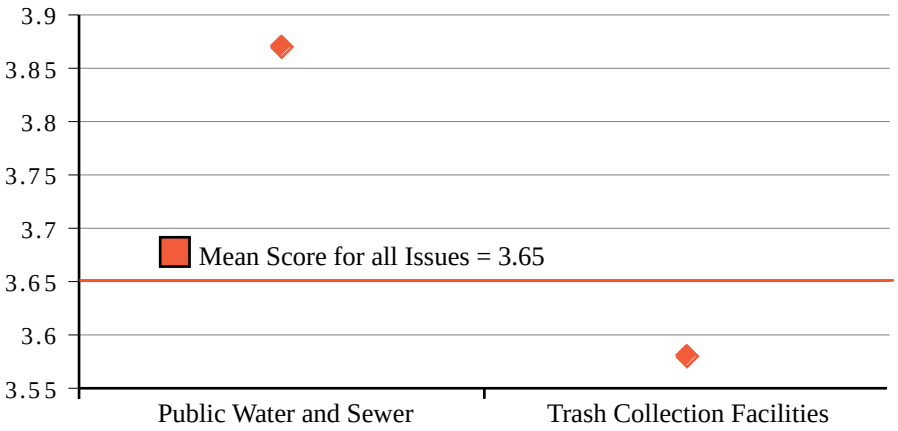
Many of the comments focused on trash and waste management, most specifically in terms of expanded opportunities for recycling and the location and distribution of public services. Both in the utilities chapter and in the housing chapter, respondents appeared concerned with not only the extent of services and the concentration of development near existing services, but also who was ultimately responsible for providing those services. While many of the comments suggested that the county needed to both control growth near existing infrastructure and expand infrastructure in designated areas to provide for future needs, some also noted that developers have a responsibility to provide infrastructure (including utilities) to serve developments and lessen the fiscal impact of developments on existing residents.

A number of respondents suggested that the county explore the use of decentralized sewer systems in areas where the provision of public utilities might not be either physically or financially feasible. The emphasis on decentralized sewer systems goes hand-in-hand with concerns over the impact of septic systems on groundwater quality (comments related to failing septic systems are included in the environmental portion of this report).

While telecommunication towers were only mentioned a couple of times, many of the comments in the environmental portion of the community survey suggest that respondents are concerned about the adverse impacts of development in rural and scenic areas, most specifically in terms of ridgelines. In addition, comments related to light pollution and the visual impact of development suggest support for controlling the dispersal of towers in Montgomery County.

The issue of trash was not limited to recycling, the location and management of collection sites, or the potential for house by house pickup. A number of respondents also noted the problem of junk cars and litter in the county. As one respondent noted, "the county is now evolving into not only the dumping grounds for dead automobiles but dead mobile homes are starting to litter the county landscape on Ellett Road in Ellett Valley, on Fairview Church Rd, on Rt 615 toward Pilot."

Utility Issues: Community Survey Mean Results, 2003



	Mean Score
Public Water and Sewer	3.87
Trash Collection Facilities	3.58
Mean Score for All Issues	3.65

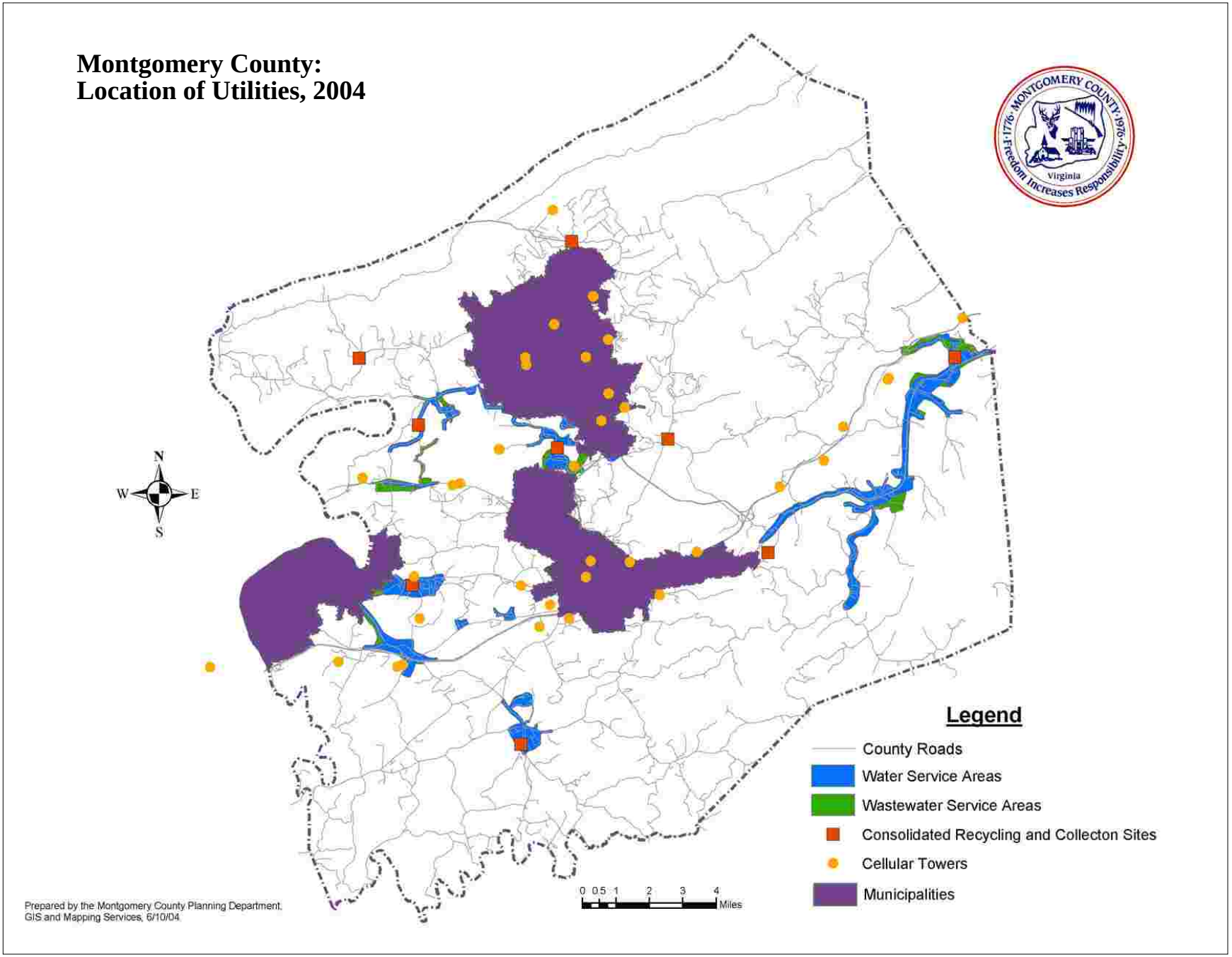
Note: Forty-one issues were included in the "rate this issue in terms of importance" portion of the community survey. A mean score was calculated for each of the 41 issues, as well as for the total of all issues. Issues with scores higher than 3.65 (the mean for all issues) indicate that the majority of respondents rated the issue greater importance; a score lower than 3.65 indicates that the majority of respondents rated the issue of less importance than the on average. The scale for the survey was: 0=no response; 1= not important; 2=minimally important; 3=moderately important; 4=important; and 5=very important. Source: 2003 Community Survey, Montgomery County, Virginia.

HISTORIC AND CURRENT CONDITIONS AND TRENDS

Public Water and Sewer.

Blacksburg provides water services through its membership in the Blacksburg, Christiansburg, & VPI Water Authority and sewer services through its membership in the Blacksburg-VPI Sanitation Authority. Christiansburg provides water service through its membership in the Blacksburg, Christiansburg, & VPI Water Authority and sewer service through its operation of the Crab Creek Sewage Treatment Plant (STP).

In selected areas of the County, outside the towns, public water is provided by the Public Service Authority (PSA), which operates several well systems but mostly buys water from


Montgomery County:
Location of Utilities, 2004
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Legend
County Roads
Water Service Areas
Wastewater Service Areas
Consolidated Recycling and Collecton Sites
Cellular Towers
Municipalities
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Prepared by the Montgomery County Planning Department,
GIS and Mapping Services, 6/10/04

neighboring jurisdictions (Blacksburg, Christiansburg, and Radford) and the Radford Army Ammunition Plant (RAAP). All 3 water treatment plants (BC&VPI Water Authority, RAAP, and Radford City) withdraw water from the New River.

For Montgomery County, water is provided from 3 water treatment plants (Radford, RAAP and the Blacksburg Christiansburg & VPI Water Authority), none of which is controlled by the County. Wastewater is handled at 3 large sewage treatment plants (stp) and several small stps.

The cost to operate these plants is increasing along with growing state and federal regulations and testing requirements. Virginia Senate Bill 1221 (approved and signed into law) calls for a comprehensive water supply planning process to (1) ensure that adequate and safe drinking water is available; (2) encourage and protect all beneficial uses; and (3) encourage, promote, and develop incentives for alternative water sources.

The network of individual water distribution lines and service areas is growing closer together. The ability of the various water systems to back each other up would provide reliability benefits and could possibly reduce the daily coast of operation. Roanoke/Salem/Roanoke County provide a nearby example of the long-term advantages to be gained by interconnecting water systems. The existing 2.5 million gallons per day (mgd) RAAP treatment plant could be upgraded to 4.5 mgd. There is also the 20 mgd RAAP treatment plant for non-potable water that could be upgraded to provide potable water.

Public Service Authority

The PSA provides for wastewater service through County membership in the Pepper's Ferry Regional Wastewater Treatment Authority; through capacity agreements with the Blacksburg VPI Sanitation Authority (Stroubles Creek STP) and Christiansburg (Crab Creek STP); and through the operation of small sewage treatment plants in Riner, Shawsville, and Elliston. In addition, there are several privately owned water and sewer systems serving specific subdivisions (for example, Blacksburg Country Club Estates), and numerous individual wells and septic systems.

The Peppers Ferry Regional Wastewater Treatment Authority recently changed from a capacity approach (where each member locality owned a specified portion of the authority's total treatment capacity) to a "put and pay" approach (where each member locality paid depending on their actual sewage throughput). This institutional change has given the authority greater flexibility in providing service to member localities and planning for future treatment needs.

In 1993, the County commissioned the "Countywide Study Water and Wastewater Facilities Montgomery County, Virginia". This study updated a previous water and wastewater study prepared in 1986. Using the 1993 Countywide Study, 39 water and sewer projects were evaluated and 24 of them were added to the Comprehensive Plan by amendment in 1999. An additional 2 projects were added by amendment in 2002 in support of the Prices Fork Water Project. Four of these projects have been completed or are nearing completion:

- Sewer
  Riner Expansion;
- Water
  Prices Mountain/Oilwell Rd,
  Merrimac Loop
  Merrimac-Prices Fork.

The remaining projects need to be carefully evaluated with regard to the projects' compatibility with the comprehensive plan and factors such as economic and engineering feasibility.

A preliminary review by the Utilities Working Group found little basis for several of the remaining projects in terms of current or potential health problems or growth areas. The

PSA has completed improvements and extensions to its water system supplying the Prices Fork and Merrimac communities with water from the RAAP.

Now is the time for the County to consider full membership in the Water Authority. For this to become a reality, the county and the two towns will need to develop coordinated land uses strategies for adjacent areas and include them within the respective Comprehensive Plans.

Private Water and Sewer

In 1992, the Extension Service household water quality educational program tested 461 household water supplies in the county. The study concluded:

> "Considering the results from both the raw and tap water sample groups, and the influence of water treatment devices, the major remaining household water quality problem in Montgomery County, from a nuisance standpoint, was hardness. The major health-related concerns were corrosivity (because of the potential to raise dissolved copper and lead levels in water), sodium bacteria, and to a lesser extent nitrate. Forty-eight percent of the samples undergoing bacteriological analysis tested positive for total coliform and 27% for fecal coliform bacteria. In these positive cases, participants were advised of ways to improve well conditions and encouraged to pursue retesting for coliform bacteria. In the cases of corrosivity and sodium, conditions were likely made worse due to the installation of commercial water softeners on drinking water lines." (2)

Privately owned water and sewer systems sometimes suffer from inadequate service, inadequate capital infrastructure, poor financial management and/or excessive service rates. In such cases it may be in the public interest for the systems to be acquired and operated by the PSA. Cost-sharing by homeowners, who would benefit from the acquisition, may be required to make such acquisitions financially feasible to the PSA. While in general it is more cost effective to cluster growth in areas that already have public water and sewer lines, it will not always be in the public interest to do so. To maintain the distinct character of "villages" in the County, it may be necessary to deny access to service lines which run through areas not designated for growth. Communities with health problems should not be forced to choose between poor water or rampant growth.

Telecommunications, Electricity. and Natural Gas

These utilities are provided by the private sector. The provision of electric and telecommunication services are basic to any development occurring in the County. The provision of high speed fiber optics service and natural gas are important to the development of designated growth areas and their higher residential densities. However, when providing any of these services, the impact upon the natural environment must be mitigated. Examples include overhead power lines in residential subdivisions and telecommunication towers in important viewsheds or environmentally sensitive areas.

Telecommunications Towers

At the request of the Board of Supervisors, County staff worked with Blacksburg, Christiansburg, Radford and Pulaski County representatives to develop a regional approach to:

- Uniform definition and approach to co-location;
- Uniform and consistent notification procedures;
- Uniform approach to siting of new towers;
- Uniform mapping of tower sites; and
- Consistent use of consultants to assist

2. Virginia Extension Service (April 1993). "Evaluation of Household Water Quality in Montgomery County, Virginia"

jurisdictions in review of requests.

This approach was adopted as an amendment to the Comprehensive Plan on May 14, 2001.

Solid Waste Collections

In 1991 the County, along with Blacksburg, Christiansburg and Virginia Tech completed and adopted the Montgomery County Solid Waste Management Plan, as required by the State of Virginia. In implementation of the plan, the County joined with the two towns and university in 1995 to form the Montgomery Regional Solid Waste Authority (MRSWA). Subsequently, the County's Mid-County Landfill was closed and replaced by MRSWAs recycling processing facility and transfer station where County solid waste is received for processing and subsequent hauling to the Cloyds Mountain Landfill in Pulaski County. This Cloyds Mountain Landfill is operated by the New River Resource Authority (NRRA). NRRA members include MRSWA along with Pulaski County and Radford.

The County operates a solid waste collection system composed of 9 manned, consolidated collection sites around the County to receive household wastes and recyclables and 2 unmanned green box sites.

Recycling

Recycling a significant part of the waste stream is required by law (currently 25%) and is cost effective. Education can improve both the quality and quantity of recyclables, thus reducing costs. Recycling also encourages County residents to care for the environment, and obtain satisfaction from doing so.

As the regions largest employer and largest landlord, Virginia Tech has the responsibility to serve a role model for recycling efforts. The volume of recyclables Virginia Tech chooses to collect directly impacts the finances of MRSWA recycling operations. (Currently MRSWA recycling is operating at 50% of its capacity of 80 tons/day.) Moreover, Virginia Tech can pave the way for new recycling efforts e.g. "e-waste" recycling of computers, monitors and electronic equipment.

Storm Water Management

Under the Virginia Code and subsequent regulations, “all land disturbing activities undertaken on private and public lands in the Commonwealth of Virginia must meet the 19 “minimum standards” for erosion and sediment control” which are spelled out in the Virginia Erosion and Sediment Control Regulations (§4VAC50-30-40). Presently, the only stormwater regulations enforced by the county are minimum standard #19 of the state erosion & sediment control regulations, “Stormwater Management,” which controls the volume and peak rate but not the frequency of stormwater runoff from developed properties. (3)

Hazard Mitigation

Localities must now have an adopted hazard mitigation plan in order to receive funding to recover from any presidential declared disasters such as the flooding of February, 2003. Rather than each locality prepare such a plan on its own, the NRVPDC is leading the effort to prepare a regional hazard mitigation plan. A more detailed discussion of natural hazards in Montgomery County is included in the introduction to the Environmental Resources chapter.

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3. The State’s minimum standards cover 19 issues: 1) soil stabilization, 2) soil stockpile stabilization, 3) permanent stabilization, 4) sediment basins and traps, 5) stabilization of earthen structures, 6) sediment traps and sediment basins, 7) cut and fill slopes design and construction, 8) concentrated runoff down slopes, 9) slope maintenance, 10) storm sewer inlet protection, 11) stormwater conveyance protection, 12) work in live watercourse, 13) crossing live watercourse, 14) regulation of watercourse crossing; 15) stabilization of watercourse, 16) underground utility line installation, 17) vehicular sediment tracking, 18) removal of temporary measures, and 19) stormwater management. Virginia Department of Conservation and Recreation (2003). “Virginia Erosion and Sediment Control Regulations: Minimum Standards Section 4VAC50-30-40. Pamphlet. Available at: http://222.dcr.state.va.us/sw/docs/MSPamphlet.PDF.

4. Additional information on environmental hazards and mitigation are included in the introduction to the Environmental Resources chapter of this plan.

Utilities: Goals

UTL 1.0 Water & Sewer Goal: Provide a planning framework for the provision of public and private water and sewer, so that the water and sewer projects are consistent with the County's land use policies while ensuring adequate, safe drinking water and proper, environmentally safe disposal of wastewater/sewage for all County residents.

UTL 1.1 Regional Cooperation: Approach the provision of public water and sewer from a regional perspective in order to provide these services more efficiently and effectively and to provide alternative sources in the event of individual system failures. (1)

UTL 1.1.1 Regional Water Authority: Work to obtain full membership for Montgomery County in the Blacksburg, Christiansburg & VPI Water Authority.

UTL 1.1.2 Water Supply Study: Work through the New River Valley Planning District Commission (NRVPDC) to study the long-term water needs (supply & demand) of local users in the county and the district. (2)

UTL 1.1.3 System Interconnect: Evaluate the feasibility of interconnecting the major public water systems in Montgomery County and Radford, including the land use implications. (3)

UTL 1.1.4 Institutional Arrangements: Evaluate existing authorities, service areas and jurisdictional agreements with regards to greater regional cooperation involving the Blacksburg, Christiansburg & VPI Water Authority, RAAP/Montgomery County and the City of Radford.

UTL 1.1.5 Regional Wastewater Authority: Continue County membership in the Peppers Ferry Regional Wastewater Treatment Authority. Evaluate the feasibility of a regional approach to wastewater treatment involving the Peppers Ferry Authority, the Blacksburg VPI Sanitation Authority and the Crab Creek STP operated by Christiansburg.

UTL 1.2 Public Systems: Continue to provide safe and reliable water and sewer utilities at reasonable cost through the Public Service Authority (PSA) and through line extensions from the towns and Radford. Provide for the orderly extension of public water and sewer service to designated growth areas and to areas with designated public health problems. (4)

UTL 1.2.1 Water Supply: Study the feasibility of developing an independent and reliable source of safe drinking water for County residents by continuing to work with the Radford Army Ammunition Plant (RAAP).

UTL 1.2.2 Project Priorities: Work with the Public Service Authority (PSA) to evaluate and prioritize the 22 outstanding water and sewer projects added to the Comprehensive Plan by amendments in 1999 and 2002. Among the factors to consider in establishing priorities are: engineering feasibility, financing feasibility,

Cross References and Notes:

1. Regional cooperation is one of the linchpins of *Montgomery County, 2025*. Specific information on regional approaches is included in the Introduction and in PNG 1.0: Local and Regional Cooperation (pg. 66). Regional cooperation and efforts are also addressed in other portions of this chapter, most notably in terms of Public Water and Sewer Systems (UTL 1.2, pg. 234), Telecommunication Towers (UTL 2.2, pg. 236), Solid Waste Management (UTL 3.1, pg. 237), and Stormwater Management (UTL 4.0, pg. 237).
2. Surface and groundwater quality are addressed in ENV 3.0: Streams, Rivers, and Surface Waters (pg. 141); ENV 5.0: Groundwater (pg. 144); ENV 5.3: Groundwater Quality Protection Programs (pg.145); ENV 5.4 Well-Head Protection (pg.145); ENV 6.0 Karst (pg.147); and ENV 7.0: Stormwater and Erosion Control (pg.148).
3. Policies governing the provision of public utilities are included in the following Land Use Policies: PLU 1.2.3 Resource Stewardship Areas (pg. 36); PLU 1.3.3 Rural Areas (pg. 37); PLU 1.4.3 Rural Communities (pg. 39); PLU 1.5.3 Residential Transition Areas (pg 40); PLU 1.6.5 Village Expansion Areas (pg. 42); PLU 1.7.5 Villages (pg. 45); PLU 1.8.5 Urban Expansion Areas (pg. 46); PLU 1.8.6 Municipal Coordination/Cooperation (pg. 47); and PLU 2.1(b) Criteria for Evaluating Rezoning Applications--Public Utilities (pg. 48).

Cross References and Notes:

4. Specific policies addressing the provision and extension of public utilities in the seven land use policy areas are included in the Planning and Land Use Chapter: PLU 1.2.3 Resource Stewardship Areas (pg. 36); PLU 1.3.3 Rural Areas (pg. 37); PLU 1.4.3 Rural Communities (pg. 39); PLU 1.5.3 Residential Transition Areas (pg. 40); PLU 1.6.5 Village Expansion Areas (pg. 42); PLU 1.7.5 Villages (pg. 45); PLU 1.8.5 Urban Expansion Areas (pg. 46); PLU 1.8.6 Municipal Coordination/Cooperation (pg. 47); and PLU 2.1(b) Criteria for Evaluating Rezoning Applications--Public Utilities (pg 48).

compatibility with established service areas and compatibility with identified Comprehensive Plan growth areas, designated health problem areas, and the interest of current homeowners in having PSA water and/or sewer.

UTL 1.2.3 Financing: Work with the PSA to develop a proactive funding plan for implementation of the top ranked projects. (5)

UTL 1.2.4 Acquisition: Upon the request of a private utility or of a significant proportion of the homeowners in a subdivision, evaluate the feasibility of the PSA acquiring and operating the private water or sewer system, which serves the subdivision. Cost sharing by homeowners may be required when a private water or sewer system is acquired by the PSA at the homeowners request.

UTL 1.2.5 Growth Boundary Strategy: In compliance and coordination with the County's land use policies, restrict public water and sewer access to future development outside designated growth areas even though the lines may be present in the area.

UTL 1.3 Private Systems: Evaluate the construction and operation of private systems for selected areas outside of designated growth areas on a case by case basis.

UTL 1.3.1 Alternative Wastewater Systems: Evaluate the feasibility of using alternative wastewater systems in selected areas of the County instead of extending public sewer lines. Determine the long-term responsibilities of public and private interests in order to insure that regular maintenance is performed on alternative systems.

UTL 1.3.2 Private System Standards: Require any private systems to be constructed to Health Department and/or PSA specifications.

Cross References and Notes:
5. This should be done in conjunction with UTL 1.2.2: Project Priorities (pg. 234).

UTL 1.4 Individual Systems Objective: Support the proper use of individual wells and private septic systems in areas of the County that do not have public water and sewer and are not expected to have public water and sewer in the foreseeable future. (6)

UTL 1.4.1 Public Information: Provide residents with information on the proper (health and environmentally safe) use of individual wells and septic systems. (7)

UTL 1.4.2 Well Testing: Work with the Extension Service to periodically repeat their successful 1992 household water quality educational program for individual well users. (8)

UTL 1.4.3 Utility Database and Geographic Information System (GIS): Work with the Health Department and other sources of information to map the location of current individual wells, septic systems and potential hazards to groundwater, in order to be better able to predict and prevent future health problems.

Cross References and Notes:
6. Individual systems are also addressed in ENV 3.3: Individual Septic Systems (pg. 142); ENV 5.1: Septic System and Well Water Testing (pg. 144); ENV 5.2: Education (pg. 145); and ENV 5.3: Groundwater Quality Protection Programs and Policies (pg. 145).
7. Public information is also addressed in ENV 5.2: Education (pg. 145).
8. Well testing is addressed in ENV 5.1.2 Septic System/Well Testing with Real Estate Transactions (pg. 144); ENV 5.4: Well-Head Protection (pg. 145); and ENV 5.7.2: Well Testing (pg. 146).

UTL 2.0 Electric, Telecommunication and Gas Utilities Goal: Provide for the orderly extension of electric service, telecommunication service (land line, wireless and/or cable) and natural gas service in a manner that supports growth and development without negatively impacting the natural environment.

UTL 2.1 Underground Lines: Require underground utility lines and utility easements in new subdivisions.

UTL 2.2 Telecommunication Towers: Retain the Regional Approach to Telecommunication Towers amendment to the Comprehensive Plan in 2001. (9)

UTL 2.2.1 Co-location: Support the siting of new antennae, microwave dishes, etc. on existing structures such as existing communication towers, tall buildings, water tanks, electric transmission towers, signs, etc. This allows for the "highest and best" use of existing structures and sites that could eliminate the need for construction of a new tower structure in an inappropriate area.

UTL 2.2.2 Uniform Approach to Siting of New Towers: (10) Siting of new communication towers in a jurisdiction should be reviewed for their potential effects on surrounding jurisdictions as well as the jurisdiction in which the structure is to be located. Newly constructed towers should be built in locations that will provide the lease negative impact to the citizens of each jurisdiction. Montgomery County encourages the use of monopole and/or "stealth towers" for new sites that require new construction or "new builds". The following locations are listed from most to least preferable when considering the siting of communication towers:

A. Industrial parks (Urban Expansion, Village Expansion, and Villages);
B. Industrial zoned lands (Urban Expansion, Village Expansion, and Villages);
C. Commercially zoned lands (Urban Expansion, Village Expansion, and Villages);
D. High density residential lands (Urban Expansion, Village Expansion, and Villages);
E. Non-ridge, wooded lands (Rural/Resource Stewardship);
F. Non-ridge, open lands (Rural/Resource Stewardship);
G. Medium density residential lands (Village Expansion and Villages;
H. Medium density residential lands (Residential Transition);
I. Medium density residential lands (Rural and Rural Communities);
J. Low density residential lands (Resource Stewardship);
K. Ridgeline Lands (Resource Stewardship)
L. Historic Lands/Districts (Villages) (10)

UTL 2.3 Broadband/Fiber Optic Networks: Provide greater access to broadband capabilities the Urban and Village Expansion Areas, and Villages in Montgomery County. (11)

UTL 2.3.1 NRV Telecommunications Plan: Review and Adopt the New River Valley Telecommunications Plan (2004).

UTL 2.3.2 Open-Access Service Network: Work with the New River Valley Planning District Commission and regional jurisdictions to establish a regional three tier (inter-county, intra-county, and local access) fiber-optic open-access service network, designed to deliver Open Access TCP/IP transport services, in the New River Valley. The network and phasing of the project would be based on the New River Valley Planning District Commission's Proposed Fiber-Optic Network (2004).

Cross References and Notes:
9. The 2001 Regional Approach to Telecommunications Towers amendment to the 1990 Comprehensive Plan has been carried over to *Montgomery County, 2025* and is included at the end of this chapter.

Cross References and Notes:
10. The uniform approach to the siting of new towers was referenced in the decision from the 4th Circuit Court of Appeals, in which the Court found in favor of Montgomery County. USCOC of Virginia RSA#3 Inc. v. Montgomery County Board of Supervisors, 343 F3d 262, 2003 U.S. Appeals LEXIS 18682 (4th Circuit 2003)
11. The New River Valley Telecommunications Plan (2004) is available from the New River Valley Planning District Commission and can be accessed at: http://www.nrvpdc.org/NRVTelecomPlan/NRVTelecomPlan.html.

UTL 3.0 Solid Waste: Provide for the collection, recycling and disposal of solid waste to satisfy the needs of the County and to provide for the well being of County residents and the environment.

UTL 3.1 Solid Waste Management: Continue to provide a comprehensive solid waste management program to address the immediate and long-term solid waste recycling and disposal needs of the County.

UTL 3.1.1 Regional Cooperation: Continue to participate in and support the operation of the Montgomery Regional Solid Waste Authority (MRSWA) and the New River Resource Authority (NRRA).

UTL 3.1.2 Recycling Education: Encourage increased quality and quantity of recycling through education in cooperation with MRSWA.

UTL 3.1.3 Virginia Tech: Encourage Virginia Tech to fully fund the on-campus recycling program including the recycling of white office paper.

UTL 3.2 Collection System: Provide for the orderly collection of solid waste and recyclables in the County.

UTL 3.2.1 Consolidated Collection Sites: Increase the number of manned consolidated sites in the County after first determining, from a countywide perspective, the best locations for additional manned sites that most efficiently and effectively meet the needs of county residents. After expanding the system, close down the remaining 2 unmanned green box sites.

UTL 3.2.2 Curbside Pickup: Continue to allow private companies to provide for curbside pickup of household trash in residential areas of the County.

UTL 3.2.3 Volunteer: Continue to support volunteer cleanup efforts including the spring cleanup of roadside trash through the Bloomin' and Broomin' program.

UTL 3.2.4 Brush-to-Mulch Strategy: Continue to provide for brush-to-mulch recycling at the old Mid-County Landfill Site.

UTL 4.0 Stormwater Management: Effectively manage stormwater runoff and erosion in order to protect properties, surface water quality and aquatic habitat to maintain and enhance human health and safety.

UTL 4.1 Watershed Approach: In cooperation with Blacksburg and Christiansburg, develop a regional stormwater management initiative, based on watershed boundaries, to effectively manage stormwater runoff.

UTL 4.1.1 Stormwater Ordinance: Consider for adoption of a local stormwater management program to manage both the quantity and quality of runoff. Such programs are permitted as a local option under Virginia Stormwater Management Law. Coordinate with, and encourage, Blacksburg and Christiansburg to adopt similar ordinances.

UTL 4.1.2 Regional Stormwater Facilities: Within the watershed approach, evaluate the efficiency and effectiveness of fewer, larger detention facilities with more stringent maintenance responsibilities.

UTL 4.1.3 User Fees: Consider, in cooperation with Blacksburg and Christiansburg, a stormwater utility approach or an impervious surface fee approach or other types of user fees to pay for the development and maintenance of regional stormwater facilities.

UTL 4.2 Village Planning and Stormwater Management. Work with the County Engineer to develop a stormwater management plans in tandem with each of the six village plans (Belview, Elliston-Lafayette, Plum Creek, Prices Fork, Riner, and Shawsville).

UTL 4.3 Regional Hazard Mitigation Plan: Review and adopt the regional hazard mitigation plan currently being developed by the New River Valley Planning District Commission (NRVPDC) along with the participation of local jurisdictions. (14)

Cross References and Notes:
12. Stormwater management is discussed in greater detail in ENV 7.0, including a stormwater management program (ENV 7.1, pg. 148), a stormwater utility (ENV 7.2, pg. 149), and erosion and sedimentation control compliance (ENV 7.3, pg. 149).
13. UTL 4.2 is cross-listed as ENV 7.1.1 (pg. 148).
14. The NRV Regional Hazard Mitigation Plan is also addressed under ENV 4.3: Public Safety (pg. 144) and SFY 1.1.4: NRV Hazard Mitigation Plan (pg. 197). Specific strategies included in ENV 4.0: Floodplains (pg. 143) and SFY1.5: Regional Opportunities (pg. 198) reflect specific suggestions included in the NRV Hazard Mitigation Plan.